

**Bonneville Power Administration  
Kangley-Echo Lake Project  
Public Comment Database**

**Final Draft**

**Prepared for  
Bonneville Power Administration**

**September 2002**

Prepared by



101 Stewart Street – Suite 1101  
Seattle, WA 98101  
(206) 269-5041

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## Introduction

As part of a proposal to build a new 500-kilovolt (500-kV) transmission line in the Kangley-Echo Lake area, Bonneville Power Administration (BPA) evaluated the environmental impacts of various transmission route alternatives in a draft environmental impact statement (DEIS) (June 2001). The DEIS identified a preferred alternative that would parallel an existing BPA transmission line through the Cedar River Municipal Watershed. Some commenters suggested that BPA had not analyzed a reasonable range of alternatives as required by the National Environmental Policy Act, and that BPA should prepare a supplemental draft EIS (SDEIS) and issue the document for public review and comment. BPA subsequently agreed to do so, and opened up a 60-day scoping period to take public scoping comments on these new alternatives. The comments received during this scoping period are the subject of this report.

BPA hosted a series of six public meetings during the scoping period early in the summer of 2002: Wednesday, June 5, in Seattle; Thursday, June 6, in North Bend; Saturday, June 8, in Black Diamond; Wednesday, June 12, in Covington; Thursday, June 13, in Maple Valley; and Thursday, July 11, at Snoqualmie Pass. During the public meetings, attendees were invited to interact with BPA staff and ask questions in an informal, “open house” format, and to give comments to be included in the recorded proceedings of the meetings. In total, over 500 people attended the public meetings.

BPA received almost 1,600 comments during this scoping period. These comments were subsequently entered into a database and “coded” (catalogued according to the subjects discussed), to provide a structural base from which to identify key themes and major trends across all the comments received. The database contains information on comments logged by BPA as #441 – #1385, and includes letters, comment forms, petitions, emails, faxes, and notes of telephone calls received by BPA, as well as transcripts from the six public meetings and comments noted by BPA staff during the “open house” portion of each public meeting. These comments express a wide range of stakeholder input and demonstrate the intensity of public debate about this project.

## Database Methodology

### Set-up

The database was constructed using Microsoft Access software and data have been converted into Microsoft Excel for users without Access software.

### Comment Summary

Comments ranged in length from a single question about a public meeting to substantial suggestions on conducting the studies required for the SDEIS. In order to accommodate the volume of some comments and code them accurately, a summary of longer comments was prepared for the database. These summaries were designed to capture the flavor as

well as the content and usually included direct text from the comment. (The full text of each comment remains a part of the formal BPA log.)

Lengthy comments were partitioned into multiple database entries so that the full range of subjects addressed by each individual could be included in the coding. As much as possible, assumptions about a commenter's preferences were avoided and not coded unless explicitly stated within the comment itself.

### **Subject Coding**

At the heart of the database is the categories used to code the comments. The categories derived from subjects studied in the DEIS and additional subjects suggested by commenters. The categories attempted to cover as wide a range of topics as possible. Sub-categories provided more detailed coding options, allowing the specific targets of each comment to show clearly in the database. "Miscellaneous" and "Out of Scope" categories were also included to capture comments that could not be described by any other category.

Following is a list of the categories and a brief description of their contents. Many of the categories overlap in subject matter, for example, concerns about vandalism near transmission towers fall under both public health and safety and right-of-way issues and were coded as both. As much as possible, those types of overlaps have been incorporated into the database. Each category included a sub-category labeled "General" for comments that touched on a particular area without going into detail. (The full list of categories and sub-categories can be found in Appendix 1.)

- *General Comments* – The range and costs of alternatives, line characteristics and more general subjects such as energy conservation and load curtailment.
- *Public involvement process* – Requests for information, comments on the public meetings, and issues surrounding BPA's revisiting of the decisions made in the original DEIS in 2001.
- *Purpose and need for action* – Questions about the demand for power in the region and the requirements of the Columbia River Treaty with Canada.
- *Land Use* – Right-of-way issues and topics pertaining to land use designations: residential, agricultural, industrial, etc.
- *Cedar River Watershed* – Those issues specific to the Watershed itself: its habitat, current condition, land use, and the Seattle municipal water supply.
- *Mitigation* – Suggestions or questions about mitigation plans (e.g., for impacted habitat) and mitigation costs.
- *Geology and Soils* – Runoff and erosion concerns, seismic risk, flooding.

- *Water Resources* – Both surface water, such as streams and rivers, groundwater, and water supply concerns not related to the Cedar River Watershed.
- *Vegetation* – Forested areas, including old- and second-growth, and concerns about maintenance of rights-of-way.
- *Fisheries* – Includes threatened and endangered species, their habitat and habitat for other species.
- *Wildlife* - Includes threatened and endangered species, habitat, and issues related to forest conservation plans.
- *Wetlands* – Includes forested and non-forested wetlands.
- *Visual Resources* – Aesthetics that would be affected by the alternatives.
- *Socioeconomics* – The full range of issues involving potential effects on property values, business impacts, tax implications, and displacements.
- *Community Values* – Unquantifiable elements, such as equity between rural and urban communities, questions about the balance between people and nature, and the potential emotional distress of project implementation.
- *Cultural Resources* – Cultural and/or historic elements that could be affected.
- *Noise* – Includes both construction noise and noise generated during transmission line operations.
- *Air Quality* – General concerns about potential effects on air quality.
- *Public Health and Safety* – Includes concerns about potential hazards such as EMF exposure, fire, and toxic substances.

### **Data Fields**

Below is an explanation of the fields that captured identifying information, and the criteria used for populating each field.

<i>Stakeholder Name</i>	First and/or last name used when available; “Unknown” used when name unavailable
<i>BPA log ID #</i>	4-digit number from 0441-1385 that match comments in BPA’s log entries
<i>Stakeholder type</i>	Individual                      Elected Official

	Business Interest Group Tribes	State Agency Local Agency Federal Agency
<i>Form of comment</i>	Public meetings: Seattle North Bend Black Diamond Covington Maple Valley Snoqualmie Pass	Other forms: Letter Comment form Petition Email Fax Telephone Other
<i>Comment location</i>	Used if a particular location was mentioned in the comment, such as a town, residential development, geographic feature, etc.	
<i>Alternatives commenting on</i>	Used to identify all alternatives mentioned in the comment (may have multiple entries)	
<i>Preferred alternative Opposed alternative</i>	Used if a preference for or opposition to a particular alternative was expressed	

### **Form of Comment – Special Cases**

Several types of comments required defining different data entry procedures.

- *Petitions* – The first signature associated with the petition was coded. Included in the comment summary is a note of how many signatures were on the petition. When another batch of signatures for the same petition appeared with another log number, “same as log number \*\*\*\*\*” was entered as the comment summary, again with a total signature count.
- *Form Letters* – Form letters were handled similarly to petitions. Because each individual form letter had an individual BPA log number, each commenter (i.e., form letter sender) was entered into the database separately. However, the issues raised in the form letter were coded with the first letter only; in the comment summary for every subsequent duplicate form letter, “same as log number \*\*\*\*\*” appears. If the commenter added personal remarks to the form letter, those additions added to the comment summary along with “same as log number \*\*\*\*\*” and were coded.

- *Attachments* – If the commenter submitted articles, letters, maps, etc., attached to a comment, those attachments are referenced in the comment summary; however, the actual contents of the attachments were not coded.
- *Transcripts of Public Meetings* – The BPA log assigned a single number to each public meeting transcript. Because many individuals gave comments at the meetings, a system for representing each individual was also developed. An additional 3-digit number was assigned for each individual. (For example, the Seattle public meeting transcript was BPA log #1043. The first commenter in the transcript is identified as 1043-001, the next 1043-002, etc.) Individuals who commented more than once at the meeting were assigned a new number for each comment.
- *Open House Comments* – Comments recorded by BPA staff on large easel pads were compiled for inclusion in the database. Because the comments are not attributed to specific individuals, the “Name” field in the database for these comments reads “flipchart.”

The coding procedure for flipchart notes was similar to the meeting transcripts. The group of comments from each meeting was assigned a unique log number. Each comment within the group was then given the –001, -002, etc., designation. (For example, a comment with the BPA log number 958-001 is the first open house comment coded in the database from the Covington public meeting.)

### **Statistical Consistency**

Several characteristics of the database make sole reliance on statistical information for an analysis of the comments problematic. For example, a group of individuals opposed to Alternative C commented frequently and are represented in the database numerous times; four people alone represent 2 percent of the all the entries in the database, a fact which must be considered in any scrutiny of statistical opposition to Alternative C.

Another example is the flipchart comments recorded at the open houses, which account for 30 percent of the database. These comments were recorded by BPA staff during informal conversations with stakeholders prior to the formal comment period at each public meeting. Names are not included with these comments, so the 478 flipchart entries may not be reflective of the diversity of opinion, as it is impossible to know how many individuals are represented in these comments.

Because comments often included statements about more than one category (and sometimes more than one subcategory), and were coded with multiple entries, category percentage totals do not add up to 100 percent.

Finally, because care was taken not to make any assumptions about the comments, the numbers reporting alternative preferences and opposition may not be useful. Thirty-seven percent of the comments discussed Alternative 1 in some way and 35 percent discussed Alternative C. (Alternative A was third, with 10 percent mention.) Note that

this does not reflect whether the commenter preferred or opposed any of these alternatives; unless such an opinion was explicitly stated, it was not included in the database.

## Comment Summary

### Major Trends

For the most part, comments fall into one of two categories: those opposed to a new transmission line *outside* the Cedar River Watershed, and those opposed to a new transmission line *inside* the Cedar River Watershed. The context and details of these comments, of course, vary greatly. Examples of comments that do not align with one of these trends are requests for further information or clarification from BPA, and questions about the need for a new transmission line at all.

Commenters in the first category above usually point to what they feel is the special nature of rural communities in King County as the cornerstone of their opposition to alternatives outside the Cedar River Watershed. They note that protection of rural lifestyles is included in King County's Growth Management Act, a fact which they feel validates the unique status of their communities.

But it is not just the human aspects of their communities that these commenters emphasize. People on private land adjacent to the Cedar River Watershed emphasize that wildlife does not recognize the human boundaries imposed on the Watershed; therefore, these landowners declare they have the same commitment to protecting the same species as do the owners of the Watershed. In addition, rural residents argue that by restricting development and participating in forest conservation programs, they are making as much of an effort to protect the natural environment as are those who are working to restore the Watershed. Rural residents especially reject the assumption that they are not environmentalists because they value their own land more than the "uninhabited" Watershed.

Commenters in the second category mentioned above point to the Cedar River Municipal Watershed Habitat Conservation Plan (HCP) as evidence of a commitment to protect the ecology of the Cedar River Watershed and restore the natural environment after many years of degradation. They consider the HCP a new guide for making land use decisions in the Watershed; and BPA's proposal would not only hinder recovery and restoration efforts, but would also disregard the community values that drive support of the HCP.

Alongside concerns about the Watershed's condition is anxiety about potential impacts to the municipal water supply and the possibility of jeopardizing water quality. Some commenters feel that the potential cost to hundreds of thousands of people of unsafe drinking water outweigh the potential impacts to a few hundred landowners. Though they express sympathy for the impacted populations, they nevertheless defend their position.



## **Top Ten Areas of Frequent Comment**

Of the subcategories that appear most prominently in the database, the following top ten were cited over 1,500 times and range from straightforward practical concerns about diminished property values to emotional concerns about the balance of considerations between rural and urban residents. In between are topics both practical and emotional such as public health and safety, and issues about the land uses associated with transmission line rights-of-way.

### *1. Property Values*

A subcategory of Socioeconomics, property values far outweighed any other concern in the minds of commenters, and was the single most significant driver behind opposition to alternatives outside the Cedar River Watershed. In fact, it was mentioned almost twice as often as any other subject. Subjects coded under this heading included not only decreased property values due to proximity to transmission lines, but also the impacts to property owners of BPA taking land for transmission line rights-of-way, and BPA's compensation to property owners for damage, resources taken, and loss of property value. Aside from general questions about the compensation policy, most commenters used this opportunity to express their view that every alternative considered, with the exception of alternatives that cross the Watershed, would have a negative impact on property values.

### *2. Costs of Alternatives*

A distant second to property values is another economic issue: the costs of alternatives, including overall project construction costs and the costs associated with acquiring land and compensating homeowners. The disparity in projected implementation budgets across the alternatives was also a major concern in this category. Many commenters want BPA to look carefully at all of these costs when weighing alternatives.

### *3. Line Characteristics*

Because of the technical nature of this category, most of the comments included questions clarifying BPA's plans for the new transmission line. Tower heights (especially increasing heights of existing towers) in residential areas were mentioned most often as a concern. Many commenters noted, however, that alternatives upgrading existing lines seem to offer fewer impacts than constructing new lines altogether.

### *4. Resource Protection*

This subcategory within Community Values has the most entries. In the context of coding the database, Resource Protection as a community value was used for comments ranging from those expressing concerns about environmental impacts to those articulating the desire to preserve lifestyles that may be threatened by the various alternatives. Commenters from all positions on the political spectrum care about what they have and want to protect it, despite the fact that the definition of a resource worth protecting may not always be the same from stakeholder to stakeholder.

#### *5. Public Health and Safety – General*

Commenters in this category often expressed the opinion that too little is known about the health effects of proximity to transmission lines. Since one of the alternatives (Alternative A) passes very close to an elementary school, children and their safety are on commenters' minds. General safety concerns include vandalism as a result of access to towers, and potential dangers from weather effects on towers close to residential areas. Commenters expect BPA to address health and safety concerns more fully in the SDEIS.

#### *6. Cedar River Watershed – General*

As the focal point of BPA's decision to revisit the DEIS, the Watershed itself figured prominently in many comments. Questions about the true impacts of Alternative 1 arose both from those commenters in support of it and those opposed. Comments were also coded in this category if they compared costs – economic, social, and environmental – of alternatives inside the Watershed to those outside. Specific comments about the Watershed (e.g., the characteristics of its wildlife or land use history) were coded using other Watershed subcategories.

#### *7. (tie) Rural vs. Urban and People vs. Nature*

Closely following Resource Protection in the Community Values category are perhaps the two most sensitive issues, defined simply as Rural vs. Urban and People vs. Nature. Rural vs. Urban is one of the most contentious issues identified in the comments and stirred the most passion: equity between who pays for and who benefits from BPA's choice of alternatives concerns a large number of commenters. If demand from the city of Seattle is driving the need for new power lines, rural residents express concern that they should not be made to shoulder the costs. The imbalance of political power between Seattle and rural governments is of great concern among commenters as well, as some feel small town populations cannot possibly stand up to the "big city."

Rural vs. Urban describes a quality of life issue as well. Many people explained that they left the city and chose to live in rural King County and, as mentioned above in Resource Protection, now have a lifestyle they want to protect.

Equity in considering people and nature is also an emotional topic. Those who say they are on the side of people feel the negative impacts of uprooting communities are far more devastating than any potential environmental damage. Often, these commenters cite restrictions on human use in the Cedar River Watershed as a reason to move forward with Alternative 1, as few people will be directly impacted by the construction and the line will be safer from human interference once constructed.

Those who consider that potential damage from environmental impacts outweighs potential impacts to people usually refer to the Cedar River Watershed and the Habitat Conservation Plan that guides its recovery and protection. These commenters express their commitment to the Watershed's protection as an invaluable natural

resource, not only for the water it supplies, but also for the habitat it provides to fish and wildlife.

#### *9. Cedar River Watershed – Current Condition*

The current condition of the Watershed found its way into many comments as an argument both for and against particular alternatives. Many argued that years of logging has left the Watershed impervious to the small amount of damage that will be incurred by Alternative 1. The perception of the Watershed as a “pristine” environment was challenged by these commenters. In addition, some commenters suggested the presence of an existing line means less work will have to be done to upgrade what is already there. Conversely, there are those who commented that more than enough damage has been done and the HCP’s commitment to the protection and restoration of the Watershed precludes allowing any further negative impacts.

#### *10. Land Use – Right-of-Way*

Right-of-way issues include concerns about the impacts of new right-of-way on existing land uses (e.g., one commenter currently grows flowers in the right-of-way on her land and would prefer they not be disturbed); the costs associated with buying easements for new right-of-way versus using existing rights-of-way; and statements about allowing or obstructing BPA access to private property and how these actions could impede project progress.

Beyond these ten, there are 95 other subcategories in the database that received attention from stakeholders. (Appendix A contains a complete list of the categories used.) The ten categories described above give a flavor of the concerns mentioned most often, but other concerns were expressed no less strongly. Many commenters were surprised that BPA was returning to decisions that had seemed final in 2000. These comments often described a kind of “limbo” for property owners and mentioned the frustration of waiting further for BPA to decide about the project. Old growth trees and surface water such as creeks and rivers also received a great deal of attention, mostly because of concerns about the potential impacts if these natural resources are not considered and preserved as carefully as possible. The visual qualities of rural residential areas, again in the context of concern for preservation, emerged often from rural residents wanting to express further why they have chosen to live where they do.

Finally, many commenters wrote passionately about the need for energy conservation, questioning the choice of continuing to increase capacity when, in their view, a shift to more aggressive conservation measures and the development of alternative technologies would be a better guarantor of the region’s future.

#### **Miscellaneous**

A number of comments in the “Miscellaneous” category expressed concerns about aviation impacts of the proposed alternatives. Commenters request that BPA take note of these concerns and address aviation issues in the SDEIS.

(Note: the entire database is available by request or on the BPA website ([www.bpa.gov](http://www.bpa.gov)).

## Database Figures

### Form of Comment

Letters and public meetings provided the most-used formats for commenting. The breakdown of all the comments in the database is as follows:

Public Meetings	656	Seattle public meeting	
Letter	514	Open House	200
Comment form	168	Formal Comments	54
Petition	7	North Bend public meeting	
Email	170	Open House	75
Fax	2	Formal Comments	21
Telephone	64	Black Diamond public meeting	
Other	8	Open House	64
		Formal Comments	26
<b>Total</b>	<b>1589</b>	Covington public meeting	
		Open House	63
		Formal Comments	29
		Maple Valley public meeting	
		Open House	23
		Formal Comments	42
		Snoqualmie Pass public meeting	
		Open House	49
		Formal Comments	10

### Categories

The categories and subcategories most often highlighted by commenters are below. (Note that not all subcategories are included.)

1. Community Values	638
a. resource protection	157
b. people and nature	126
c. rural and urban	125
2. Socioeconomics	616
a. property values	380
3. General Comments	571
a. costs of alternatives	191
b. line characteristics	171
4. Cedar River Watershed	484
a. general	152
b. current condition	117
c. water quality	108

5. Land Use	411
a. right of way	113
6. Public Health and Safety	286
a. general	155
b. EMF	105

### **Alternatives**

In spite of the caveats above related to statistics derived from the database, it is worth noting how the alternatives are represented in the database.

Sixteen percent of the comments specifically mentioned a preferred alternative; of those, 94 percent expressed a preference for Alternative 1.

Twenty-five percent of the comments specifically indicated opposition to an alternative; 83 percent of those opposed Alternative C.

### **Next Steps**

BPA will use the issues identified in the comments to analyze the alternatives considered for this project. The SDEIS will identify impacts of route alternatives and identify ways to minimize or avoid potential impacts. The SDEIS will be released for public review and comment in early 2003. The schedule for activities follows:

- **SDEIS available for 45-day public review**      **January, 2003**
- **Public meetings**      **February 2003**
- **Final EIS (FEIS)**      **Summer 2003**
- **Decision**      **Summer 2003**

## **Appendix A – List of Database Categories**

### **1. General Comments**

- a. Range of Alternatives
- b. No Action Alternative
- c. Costs of Alternatives
- d. Line Characteristics
  - i. Single-circuit
  - ii. Double-circuit
  - iii. Other
- e. Underground line
- f. Local generation
- g. Energy Conservation
- h. Load curtailment
- i. Adding equipment at substations
- j. Rate increases

### **2. Public Involvement Process**

- a. General
- b. Meetings and Notices
- c. Extensions
- d. NEPA
- e. Need to revisit EIS

### **3. Purpose and Need for Action**

- a. General
- b. Local need
- c. Canadian Entitlement

### **4. Land Use**

- a. General
- b. Residential land
- c. Timberland
- d. Agricultural land
- e. Industrial
- f. Recreation
- g. Urban development
- h. Transportation issues
- i. Plan consistency including compliance w/local, state, federal laws
- j. Right-of-way

### **5. Cedar River Watershed**

- a. General
- b. Land Use
- c. Recreation
- d. Water quality – municipal water supply

## **Database Categories, con't.**

### **5. Cedar River Watershed (con't.)**

- e. Water quality – other
- f. Visual resources
- g. Current condition
- h. Habitat

### **6. Mitigation**

- a. General
- b. Fisheries
- c. Wildlife
- d. Wetlands
- e. Vegetation
- f. Costs

### **7. Geology and Soils**

- a. General
- b. Erosion potential and control (including runoff)
- c. Seismic Risk
- d. Landslide Risk
- e. Flooding
- f. Sinkholes

### **8. Water Resources**

- a. General
- b. Floodplains
- c. Groundwater
- d. Surface Water
- e. Water quality (non-Cedar River)

### **9. Vegetation**

- a. General
- b. Special status plant species
- c. Noxious weeds
- d. Right-of-way maintenance

### **10. Fisheries**

- a. General
- b. Habitat
- c. Federally-listed species
- d. Federal Candidate species
- e. Federal Species of Concern
- f. National forest sensitive species

## **Database Categories, con't.**

### **11. Wildlife**

- a. General
- b. Habitat
- c. Federally-listed species
- d. Federal Candidate species
- e. Federal Species of Concern
- f. National forest sensitive species
- g. Survey and Manage species (Northwest Forest Plan)

### **12. Wetlands**

- a. General
- b. Forested wetlands
- c. Other wetlands

### **13. Visual Resources**

- a. General
- b. Residential areas
- c. Recreation areas
- d. Transportation areas

### **14. Socioeconomics**

- a. General
- b. Property values (incl. takings, compensation)
- c. Displacement
- d. Easements
- e. Business impacts
- f. Taxes

### **15. Community Values**

- a. General
- b. Rural/urban – equity/fairness (who pays/who benefits)
- c. People/nature – equity/fairness
- d. NIMBY issues
- e. Resource protection
- f. Emotional distress

### **16. Cultural Resources**

- a. General
- b. Tribal U&A
- c. Historic
- d. Prehistoric



## **Database Categories, con't.**

### **17. Noise**

- a. General
- b. Transmission lines
- c. Construction
- d. Impact on wildlife

### **18. Air Quality**

- a. General

### **19. Public Health and Safety**

- a. General
- b. EMF
- c. Fire
- d. Toxic and Hazardous Substances
- e. Radio/TV Interference

### **20.**

- a. Miscellaneous
- b. Out of scope

## **Appendix B – Brief Description of Alternatives Under Consideration**

Alternative A: Construct a new single-circuit 500-kV line from a tap along the Schultz-Raver No. 2 line near Kangley to BPA's substation near Covington. From Covington, rebuild a portion of BPA's existing Covington-Maple Valley single circuit 230-kV transmission line with a double circuit 500-kV line, operating one side at 500-kV and the other at 230-kV. The 500-kV circuit would terminate at Echo Lake Substation via a vacant circuit of the Maple Valley-Echo Lake double-circuit 500-kV transmission line. New double-circuit towers, about 175 ft. tall, would support both circuits. The new transmission lines would be built mostly on existing rights-of-way, with the exception of the area across from the Covington substation, where the two transmission lines would need to be connected.

Alternative B: Rebuild a 38-mile portion of BPA's Rocky Reach-Maple Valley 345-kV transmission line to a double-circuit 500-kV line. The towers that would support the new line would be about 175-ft. tall. The new 500-kV line would be connected to the existing Schultz-Raver No. 2 500-kV transmission line just east of Stampede Pass and to Echo Lake Substation at the west end. The line would cross I-90 twice. Almost all of this route would be on existing right-of-way.

Alternative C: Construct a new single-circuit 500-kV line from near the community of Kangley or from BPA's Raver Substation on mostly new 150-foot wide right-of-way. New towers would be about 135 ft. tall. The new line could pass through the Ravensdale and Hobart areas and would be connected to an existing vacant (unused) Echo Lake-Maple Valley 500-kV circuit. The vacant circuit would then need to be connected to a new bay in the Echo Lake Substation. This alternative would require the purchase of new right-of-way.

Alternative D: Construct a new single-circuit 500-kV transmission line from east of Stampede Pass to Echo Lake Substation. The new line would be adjacent to the existing Rocky Reach-Maple Valley 345-kV line. New towers would be about 135 ft. tall. The line would cross I-90 twice. A new 150-foot wide right-of-way would need to be acquired.

Alternative 1: Construct a new single-circuit 500-kV transmission line from a tap point on BPA's Schultz-Raver No. 2 500-kV line near Kangley to its Echo Lake Substation. This line would run parallel to an existing BPA line and be about 9 miles long. BPA would acquire a new 150-ft. wide right-of-way for the line. New towers would be about 135 ft. tall.

Alternative 2: Construct a new single-circuit 500-kV line starting about 1.5 miles east of Alternative 1. The line would traverse northwest about 3 miles before continuing north paralleling the existing Raver-Echo Lake transmission line into Echo Lake Substation. This alternative would be about 9 miles long. BPA would acquire a new 150-ft. wide right-of-way for the line. New towers would be about 135 ft. tall.

Alternative 3: Construct a new single-circuit 500-kV line beginning at the same point as Alternative 2. From this point, it would traverse northeast, then turn north-northwesterly to Echo Lake Substation. This line would be about 10 miles long, or about 1-1/4 miles longer than Alternative 1. BPA would acquire a new 150-ft. wide right-of-way for the line. New towers would be about 135 ft. tall.

Alternative 4A: Construct a new single-circuit 500-kV line beginning at the same point as Alternative 2. About one-third of the way along Alternative 2, this alternative turns northwest and follows the same alignment as Alternative 1. This line would be about 9 miles long. BPA would acquire a new 150-ft. wide right-of-way for the line. New towers would be about 135 ft. tall.

Alternative 4B: Construct a new line beginning at the same point as Alternative 2. About half way along Alternative 2, this alternative would traverse southwest to connect with Alternative 1. This line would be about 9 miles. BPA would acquire a new 150-ft. wide right-of-way for the line. New towers would be about 135 ft. tall.

No Action Alternative: No new line would be built.

## Appendix C – Database Comment Entry Form

Subcategories not visible in the snapshot below are contained in drop-down menus behind the main category heading.

**Comment Entry Form**

Stakeholder Name:    BPA Log ID:   
 Stakeholder Type:  AltCodes:   
 Form of Comment:  Comment:  Issue Codes:   
 Comment Location:   
 Public Involvement Process:   
 Purpose and Need of Action:   
 General Comments:

**Commenting on:**

<input type="checkbox"/> Alternative 1	<input type="checkbox"/> Alternative 4B	<input type="checkbox"/> Alternative C
<input type="checkbox"/> Alternative 2	<input type="checkbox"/> Alternative A	<input type="checkbox"/> Alternative C1
<input type="checkbox"/> Alternative 3	<input type="checkbox"/> Alternative A1	<input type="checkbox"/> Alternative C2
<input type="checkbox"/> Alternative 4A	<input type="checkbox"/> Alternative B	<input type="checkbox"/> Alternative D

Preferred Alternative:  Fisheries:  Wetlands:   
 Opposed Alternative:  Fisheries: Federal Species of Concern ☐ Visual Resources:   
 Land Use:  Fisheries: Federal Candidate Species ☐ Socioeconomics:   
 Cedar River Watershed:  Fisheries: Federal Endangered Species ☐ Community Values:   
 Mitigation:  Wildlife:  Cultural Resources:   
 Geology and Soils:  Wildlife: Federal Species of Concern ☐ Noise:   
 Water Resources:  Wildlife: Federal Candidate Species ☐ Air Quality:   
 Vegetation:  Wildlife: Federal Endangered Species ☐ Public Health and Safety:   
 Miscellaneous, out of scope:

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